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An Assessment of the Position of Information and Communications Technology (ICT) as a Change Envoy for High Standard Education in Colleges of Education in Nigeria (Case Study Nwafor Orizu College of Education, Nsugbe, Anambra State and Enugu State College of Education (Technical), Enugu State.

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## ABSTRACT

The study assessed the position of Information and Communications Technology (ICT) as a change envoy for high standard education in Colleges of Education in Nigeria. It examined the effect of ICT on the academic achievement of students. ICTs play a pedagogic role that could in principle compliment the traditional practices of the education sector. Undoubtedly, e-learning powered by ICT use in tertiary institutions could help to expand and widen access to tertiary education and learning, improve the quality of education as well reduce its cost. This means that effective ICT use in tertiary institutions in Nigeria would help to spur positive results in improving the overall learning (and teaching) experiences as well as in up-lifting the quality of the system. Also, to determine the nature of ICT and the role of ICT as a change agent towards the education in colleges of education in Nigeria, Anambra and Enugu states as case studies. The study employed survey research design to assess the position of Information and Communications Technology (ICT) as a change envoy for high standard education in Colleges of Education in Nigeria in which a validated 10 item questionnaire termed the 'An Assessment of the Position of ICT as a change envoy for high Standard Education from categories of the population; lecturers, students, school management, staff of the ministry of education and Nigeria Communications Commission. Data collected was analyzed using frequency table, percentage and mean score analysis while the Pearson correlation method was used to test the formulated hypothesis using SPSS (statistical package for social sciences).

Key words: ICT, Communication, Education, Colleges of Education.

## Introduction

Quality assurance in the education system is a concept consisting of lot of activities that are designed to improve the quality of input, process and output of the educational system. (Okebukola 2012) quality assurance in the education system involves the process of monitoring, assessing and evaluating all aspects of the education activities and communicating the outcome to all concerned with a view of improving the products of the education system. Quality assurance in education addresses some issues which enhance the quality of education delivery. Yawa cited in Emeruo (2012) notes quality assurance in education as all proactive measures adopted by a country to ensure that the system standard remain high enough to produce results set for it. Thus, quality standard in education is the bench mark that should guide the performance of the education system. Quality assurance in education is in fact a process of continuous improvement in the quality of teaching and learning activities.

The Federal Ministry of Education (FME, 2009) remarked that quality standard in the education system are goals or targets to which learners, teachers, staff and school administration aspires to attain. Quality assurance in the education system therefore, is a multi-dimensional concept involving the various functions and activities of the education system. Such functions and activities include teaching research, staffing, students, buildings, facilities and equipment, service to the community and academic environment. It is ensuring that at least the provision of the minimum academic standard are attained and sustained.

However, today in Nigeria, there exists general disenchantment and general distrust in the quality if the education system as well as in the quality of education output, similarly (Elele, 1983) cited in (Yusuf, 2012) noted that quantitatively, the Nigerian Education scene in quite impressive but qualitative deficient. Therefore, thus research intends to investigate the role of ICT as a change agent for quality education in tertiary institution in Nigeria.

The challenges confronting our educational system in tertiary institution centers on quality attainment of education delivery, almost everything connected with education in tertiary institution is in short supply. Quality teachers are in short supply, quality buildings, quality equipment, quality laboratories, good experimental farms and other resources input that can lead to quality education are inadequately provided. Today, there exist general disenchantment and general distrust in the quality of the education system as well as in the quality of education output.

The quality of education is the prime factor that determines the worth and significance of the system to both the recipients and the society at large. Thus, Igwe (2009) notes that, the promises of information and communication technologies (ICTs) have driven e-learning in transforming education delivery and thereby advancing the knowledge economy.

The knowledge, economy for example sets a new scene for education and new challenges and prospects for education is a pre-requisite of the knowledge based economy and the production and use of new knowledge both require a more educated population and workforce (Arikewuyo, 2004). ICTs are very powerful tool for diffusing knowledge and information which is fundamental aspects of the education process.

In that capacity, ICTs play a pedagogic role that could in principle compliment the traditional practices of the education sector (Igwe, 2009).

Undoubtedly, e-learning powered by ICT use in tertiary institutions could help to expand and widen access to tertiary education and learning, improve the quality of education as well reduce its cost. This means that effective ICT use in tertiary institutions in Nigeria could help to spur positive results in improving the overall learning (and teaching) experiences as well as in up-lifting the quality of the system. Therefore the research seeks to investigate the role of ICT as a change agent for quality education in tertiary institution in Nigeria.

## **DEFINITION OF QUALITY EDUCATION**

The Federal Ministry of Education (FME, 2009) remarked that quality standard in the education system are goals or targets to which learners, teachers, staff and school administration aspires to attain. Quality assurance in the education system therefore, is a multi-dimensional concepts involving the various functions and activities of the education system. Such functions and activities include teaching research, staffing, students, buildings, facilities and equipment, service to the community and academic environment. It is ensuring that atleast the provision of the minimum academic standard are attained and sustained.

## THE CONCEPT OF QUALITY ASSURANCE IN EDUCATION

Quality in education is a multidimensional concept and is often conceptualized differently by different stakeholders including the government, teachers, administrators, students, and employees (Babalola, Adedeji, Erwat, 2007). Generally, quality implies fitness to purpose in relation to user/customer needs. In line with this, the British Standards Institute (BSI) views quality as the totality of features and characteristics of a product or service that bears on its ability to satisfy stated or implied needs.

Quality assurance (QA) is a process-centred approach to ensuring that an organization is providing the best possible products or services. Its central focus is on enhancing and improving the processes that are used to create the end product or result, rather than on the result itself or some part of the process such as planning, design, development, production and delivery.

In the context of education, Ciwar (2005) sees quality assurance as involving the setting of standards for the various processes and activities leading to the production of graduates by training institutions. These

processes were noted by Joseph & Agih (2007) to include: requirements for entry into educational programmes, programme duration, course content, quality of teachers - number of qualifications and teaching competence, standard of instructional infrastructure and facilities - number and adequacy, the school environment from a holistic perspective, and examinations - quality of examination items, supervision, moderation of results, and grading system.

## THE CONCEPT OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

According to Major, (2011) there seems to be agreement by writers on this subject that data processed, analyzed, interpreted and made meaningful to the recipient of a message constitutes information. At a basic level, technology is conceptualized as the use of information to gain control over nature in order to survive the complexities and challenges caused by a changing environment and further using the same to build a civilized culture for achieving higher standards of living.

Information technology (IT) is concerned with managing and processing information using electronics, computers and computer software to convert, store, protect, process, transmit and retrieve information.

The advancement from information technology (IT) to information and communication technology (ICT) was the result of the advent of the Internet, broadband connections and broad wave transmission energy, enabling a wider applicability in business, education and the like (Onuma, 2007) The importance of ICT driven quality assurance procedures in Nigeria Universities is in line with an emerging global order. Joseph and Agih (2007) noted that the world's workforce is increasingly geographically fluid due to economic globalization engendered, in part, by ICT. Knowledge, skills and competencies have quickly become economic commodities and there is consequently legitimate pressure on national systems to enter and thrive in the competitive global market where knowledge is central to success. There is thus the urgent need for sustainable quality assurance procedures in Nigeria universities powered by ICT tools. Such procedures would bring Nigerian universities and graduates on par with others and ensure that the globally accepted Minimum Academic Standards (MAS) are better maintained.

## **Colleges of Education**

Colleges of Education in Nigeria have played a vital role in our national development, especially in the education sector. The teaching function of colleges of education in Nigeria for instance, has contributed immensely to national development particularly in the development of middle-level manpower for the nation's primary and junior secondary schools. Over the years, colleges of education have produced a large number of non-graduate professional (NCE) teachers that teach in our primary and junior secondary schools, thus alleviating the manpower problems of the nation at those levels. These teachers have also laid the foundation of whatever formal education that is received later in life by that now appear in different forms as accountants, teachers, lawyers, economists, engineer, doctors, agriculturalists, architects, etc. The idea of these people put into productive use has enhanced the nation's development.

Colleges of Education in Nigeria have plan waded into the task area of producing professionally trained teachers for our vocational and technical secondary schools in order to meet the nation's requirements for technological take-off as provided in the National Policy on Education (1981). Another aspect of the role of Colleges of Education in national development according to (Nwankwo 1988) is their ability to adapt quickly to the educational needs of their immediate environment. Pre-occupation with universal academic, cultures, scholarships, research and international acceptability often inhibit Nigerian universities from responding promptly and appropriately to the local needs and demands. Standing at the middle as they are, Colleges of Education are often called upon to mount flexible programmes that can be tailored to the urgent requirements of the primary and junior secondary schools.

Another contribution of Colleges of Education to national development is in the structural integration of Nigeria. Through public lectures, seminars, workshops, conference, inter-collegiate sports competition and the implementation of their curriculum, especially in General Studies Courses like Citizenship Education, they have raised the level of national unity, and national consciousness, sense of oneness, common citizenship and common purpose amongst Nigerians, thus enhancing the development of the nation. In addition, they provide in-service courses, extra-mural classes and sandwich programmes to raise the literacy level of the members of the communities around them.

Another vital area of their contribution to national development is in the area of research. Their research results enable the educational planners to formulate appropriate education policies for the nation's development.

Finally, they have assisted in national development by providing compulsory and agricultural extension services to the communities around them. The consultancy services boost the economic activities of the communities around them, while the agricultural extension services enhance the improvement of agriculture and thus, the national economy.

## Statement of the Problem/Justification

Elele (1983) cited in Yusuf (2012) notes that quantitatively, the Nigerian Education scene in quite impressive but qualitative deficient. There exist general disenchantment and general distrust in the quality of the education system as well as in the quality of education output. (Arikewuyo, 2004) stated that ICT can play a very prominent role in diffusing knowledge and information which is fundamental aspects of the education process towards quality attainments. In this capacity, ICT plays a pedagogic role that could in principle complement the traditional practices of the education sector. Therefore, the problem confronting this research is to appraise the role of ICT as a change agent towards quality education in tertiary institution in Nigeria.

## **Research Questions**

The following research questions would guide the study:

- 1. What constitute quality in the education of tertiary institution in Nigeria?
- 2. What is ICT and what constitute the role for quality education in tertiary institution in Nigeria?
- 3. What constitute the fundamental objective of quality education in tertiary institution in Nigeria?

## **Objectives of the Study**

Specifically, this study would:

- Determine what constitute quality in the education of tertiary institution in Nigeria
- Determine the nature of ICT and the role of ICT as a change agent towards the education of tertiary institution in Nigeria
- Appraise fundamental objectives of quality education attainment in tertiary institution in Nigeria.

## **Research Methodology**

This study will adopt survey research design to assess the evaluation of adoption and productiveness of online counseling in colleges of education in Southeast Nigeria. According to Nworgu (2006), survey research design insured that a group of people or items is studied by collecting analyzing data from only a few people or items considered to be representative of the entire group. It uses a questionnaire to determine the opinions, preferences, attitudes and perceptions of people about issues that concern them. A survey design is suitable for this research because it is going to make use of a questionnaire to elicit information from the respondents.

A validated questionnaire titled An Assessment of the Position of ICT as a change envoy for high Standard Education in Colleges of Education in Nigeria' (AICTSECEN), (for students and lecturers) designed by the researcher, and constructed in a 4-point Likert scale format will also be administered. The reliability of the questionnaire would also be established before use. The Statistical Model of Impact Measuring, a combination of multivariate regression methods and statistical inference would be used in analysing data generated from the study. Data analysis will be carried out on MS Excel, SPSS 17.

#### **RESENTATION OF DATA**

#### QUESTIONNAIRE ADMINISTRATION

**INSTRUCTION:** Please endeavor to complete the questionnaire by ticking the correct answer (s) from the options provided or supply the information required where necessary.

#### SECTION A: Personal Information/Data

- Gender
  a. Ma
  - Male
  - b. Female
- 2. Age Range
  - a. Below 17yrs
  - b. 18-20yrs
  - c. 21-30yrs
  - d. 31-40yrs
  - e. 41-50yrs
  - f. Above 50yrs

# 3. Faculty

a.	Arts	

- b. Agriculture
- c. Social sciences
- d. Physical sciences
- e. Biological sciences
- f. Pharmaceutical sciences
- g. Medical sciences
- h. Education
- 4. Marital status
  - a. Single
  - b. Married
  - c. Divorced
  - d. Widowed

## SECTION B

Questions on the role of ICT as a change agent for quality education in colleges of education in Nigeria.



	1	

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- The quality of education in Nigeria is on the decline. 5.
  - Strongly agreed a.
  - b. Agreed
  - Undecided с.
  - d. Disagreed
  - Strongly disagreed e.
- ICT is a necessary tool for educational development in colleges of education. 6.
  - Strongly agreed a.
  - b. Agreed
  - c. Undecided
  - d. Disagreed
  - e. Strongly disagreed
- The level of ICT knowledge in colleges of education is high. 7.
  - Strongly agreed a.
  - b. Agreed
  - Undecided c.
  - d. Disagreed
  - Strongly disagreed e.
- The impact of ICT in the quality of education in colleges of education is high. 8.
  - Strongly agreed a.
  - Agreed b.
  - c. Undecided
  - d. Disagreed
  - Strongly disagreed e.
- 9. Adequate knowledge of ICT in colleges of education would help boost the quality of graduates in Nigeria.
  - Strongly agreed a.
  - b. Agreed
  - Undecided c.
  - d. Disagreed
  - Strongly disagreed e.
- 10. Adequate knowledge of ICT in colleges of education would help curtail unemployment as graduates can be self employed.
  - Strongly agreed a.
  - b. Agreed
  - Undecided c.
  - d. Disagreed
  - Strongly disagreed e.
- 11. Suggest ways the knowledge of ICT can be further enhanced in Nigerian colleges of education.



## **BIO DATA OF RESPONDENTS**

## Table 1 gender of respondents

	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	120	60.0	60.0	60.0
	female	80	40.0	40.0	100.0
	Total	200	100.0	100.0	

Source: field survey, August, 2023.

Table1 above shows the gender distribution of the respondents used for this study.

120 respondents which represent 60.0percent of the population are male.

80 respondents which represent 40.0 percent of the population are female.

## Table 2 age grade of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	below 17years	30	15.0	15.0	15.0
	18-20years	30	15.0	15.0	30.0
	21-30years	80	40.0	40.0	70.0
	31-40years	20	10.0	10.0	80.0
	41-50years	20	10.0	10.0	90.0
	above 50years	20	10.0	10.0	100.0
	Total	200	100.0	100.0	

Source: field survey, August, 2023.

Table 2 above shows the age grade of the respondents used for this study. 30 respondents which represent 15.0 percent of the population are below 17 years. 15 respondents which represent 15.0 percent of the population are between 18-20 years. 80 respondents which represent 40.0 percent of the population are between 21-30 years 20 respondents which represent 10.0 percent of the population are between 31-40 years. 20 respondents which represent 10.0 percent of the population are between 41-50 years. 20 respondents which represent 10.0 percent of the population are between 41-50 years.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Physics Education	20	10.0	10.0	10.0
	Political sciences Ed.	15	7.5	7.5	17.5
	Economics Education	30	15.0	15.0	32.5
	Social Studies Ed.	20	10.0	10.0	42.5
	English & Literary Studies	30	15.0	15.0	57.5
	Mathematics Education	30	15.0	15.0	72.5
	Biology Education	25	12.5	12.5	85.0
	Business Education	30	15.0	15.0	100.0
	Total	200	100.0	100.0	

#### Table 3 school of respondents

Source: field survey, August, 2023.

Table 3 above shows the schools of the respondents used for this study.

20 respondents representing 10.0 percent are from the department of Physics Education.

15 respondents representing 7.5 percent are from the department of political education.

30 respondents representing 15.0 percent are from the department of economics department.

20 respondents representing 10.0 percent are from the department of social studies education.

30 respondents representing 15.0 percent are from the department of English & literary studies education.

30 respondents representing 15.0 percent are from the department of mathematics education.

25 respondents representing 12.5 percent are from the department of biology education.

30 respondents representing 15.0 percent are from the department of business education.

## Table 4 marital status of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	single	120	60.0	60.0	60.0
	married	60	30.0	30.0	90.0
	divorced	15	7.5	7.5	97.5
	widowed	5	2.5	2.5	100.0
	Total	200	100.0	100.0	

Source: field survey, August, 2023.

Table 4 above shows the marital status of respondents used for the survey

120 respondents representing 60.0percent of the population are single.

60 respondents representing 30.0 percent of the population are married.

15 respondents representing 7.5 percent of the population are divorced.

5 respondents representing 2.5 percent of the population are widowed.

## TABLES BASED ON RESEARCH QUESTIONS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	15	7.5	7.5	7.5
	agree	15	7.5	7.5	15.0
	undecided	10	5.0	5.0	20.0
	disagree	40	20.0	20.0	40.0
	strongly disagree	120	60.0	60.0	100.0
	Total	200	100.0	100.0	

Table 5 quality of education in Nigeria is on the decline

Source: field survey, August, 2023.

Table 5 shows the responses of respondents that the quality of education in Nigeria is on the decline.

15 respondents representing 7.5 percent strongly agree that the quality of education in Nigeria is on the decline.

15 respondents representing 7.5 percent agree that the quality of education in Nigeria is on the decline.

10 respondents representing 5.0 percent were undecided.

40 respondents representing 20.0 percent disagree that the quality of education in Nigeria is on the decline.

120 of the respondents representing 60.0 percent strongly disagree that the quality of education in Nigeria is on the decline.

#### Table 6 ICT is a necessary tool for educational dev in colleges of education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	80	40.0	40.0	40.0
	agree	100	50.0	50.0	90.0
	undecided	5	2.5	2.5	92.5
	disagree	10	5.0	5.0	97.5
	strongly disagree	5	2.5	2.5	100.0
	Total	200	100.0	100.0	

Source: field survey, August, 2023.

Table 6 shows the responses of respondents that ICT is a necessary tool for educational development in colleges of education.

80 respondents representing 40.0 percent strongly agree that ICT is a necessary tool for educational development in colleges of education.

100 respondents representing 50.0 percent agree that ICT is a necessary tool for educational development in colleges of education.

5 respondents representing 2.5 percent were undecided.

10 respondents representing 5.0 percent disagree that ICT is a necessary tool for educational development in colleges of education.

5 of the respondents representing 2.5 percent strongly disagree that ICT is a necessary tool for educational development in colleges of education.

	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	25	12.5	12.5	12.5
	agree	25	12.5	12.5	25.0
	undecided	20	10.0	10.0	35.0
	disagree	70	35.0	35.0	70.0
	strongly agree	60	30.0	30.0	100.0
	Total	200	100.0	100.0	

#### Table 7 there is high level of ICT knowledge in colleges of education.

Source: field survey, August, 2023.

Table 7 shows the responses of respondents that there is a high level of ICT knowledge in colleges of education.

25 respondents representing 12.5 percent strongly agree that there is a high level of ICT knowledge in colleges of education.

25 respondents representing 12.5 percent agree that there is a high level of ICT knowledge in colleges of education.

20 respondents representing 10.0 percent were undecided.

70 respondents representing 35.0 percent disagree that there is a high level of ICT knowledge in colleges of education.

60 of the respondents representing 30.0 percent strongly disagree that there is a high level of ICT knowledge in colleges of education.

## Table 8 there is high impact of ICT in the quality of education in colleges of edu.

	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	25	12.5	12.5	12.5
	agree	25	12.5	12.5	25.0
	undecided	10	5.0	5.0	30.0
	disagree	60	30.0	30.0	60.0
	strongly agree	80	40.0	40.0	100.0
	Total	200	100.0	100.0	

Source: field survey, August, 2023.

Table 8 shows the responses of respondents that there is a high impact of ICT in the quality of education in colleges of education.

25 respondents representing 12.5 percent strongly agree that there is a high impact of ICT in the quality of education in colleges of education.

25 respondents representing 12.5 percent agree that there is a high impact of ICT in the quality of education in colleges of education.

10 respondents representing 5.0 percent were undecided.

60 respondents representing 30.0 percent disagree that there is a high impact of ICT in the quality of education in colleges of education.

80 of the respondents representing 40.0 percent strongly disagree that there is a high impact of ICT in the quality of education in colleges of education.

	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	100	50.0	50.0	50.0
	agree	50	25.0	25.0	75.0
	undecided	10	5.0	5.0	80.0
	disagree	20	10.0	10.0	90.0
	Strongly disagree	20	10.0	10.0	100.0
	Total	200	100.0	100.0	

Table 9 Adequate knowledge of ICT in colleges of education would help boost the quality of graduates in Nigeria

Source: field survey, August, 2023.

Table 9 shows the responses of respondents that adequate knowledge of ICT in colleges of education would help boost the quality of graduates in Nigeria.

100 respondents representing 50.0 percent strongly agree that adequate knowledge of ICT in colleges of education would help boost the quality of graduates in Nigeria.

50 respondents representing 25.0 percent agree that adequate knowledge of ICT in colleges of education would help boost the quality of graduates in Nigeria.

10 respondents representing 5.0 percent were undecided.

20 respondents representing 10.0 percent disagree that adequate knowledge of ICT in colleges of education would help boost the quality of graduates in Nigeria.

20 of the respondents representing 10.0 percent strongly disagree that adequate knowledge of ICT in colleges of education would help boost the quality of graduates in Nigeria.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	100	50.0	50.0	50.0
	agree	60	30.0	30.0	80.0
	undecided	5	2.5	2.5	82.5
	disagree	20	10.0	10.0	92.5
	strongly agree	15	7.5	7.5	100.0
	Total	200	100.0	100.0	

Table 10 Adequate knowledge of ICT in colleges of education would help curtail unemployment as graduates can be self employed

Source: field survey, August, 2023.

Table 8 shows the responses of respondents that adequate knowledge of ICT in colleges of education would help curtail unemployment as graduates can be self employed.

100 respondents representing 50.0 percent strongly agree that adequate knowledge of ICT in colleges of education would help curtail unemployment as graduates can be self employed.

60 respondents representing 30.0 percent agree that adequate knowledge of ICT in colleges of education would help curtail unemployment as graduates can be self employed.

5 respondents representing 2.5 percent were undecided.

20 respondents representing 10.0 percent disagree that adequate knowledge of ICT in colleges of education would help curtail unemployment as graduates can be self employed.

15 of the respondents representing 7.5 percent strongly disagree that adequate knowledge of ICT in colleges of education would help curtail unemployment as graduates can be self employed.

## **RESEARCH HYPOTHESES**

#### Hypothesis 1

H<sub>0</sub>: The quality standard in colleges of education in Nigeria is low

H1: The quality standard in colleges of education in Nigeria is high

#### Level of significance: 0.05

## **Decision rule:**

In taking decision for "r", the following riles shall be observed;

- i) If the value of "r" tabulated is greater than "r" calculated, accept the alternative hypothesis (H<sub>1</sub>) and .reject the null hypothesis (H<sub>0</sub>).
- ii) If the "r" calculated is greater than the "r" tabulated, accept the null hypothesis (H<sub>0</sub>) while the alternative hypothesis is rejected.

## **Table 11 Correlations**

		quality of education in Nigeria is on the decline	ICT is a necessary tool for educational dev in colleges of edu.
quality of education in Nigeria is on the Pearson Correlation decline		1	.581**
	Sig. (2-tailed)	200	.000 200
ICT is a necessary tool for educational	Pearson Correlation	.581**	1
dev in coneges of edu.	Sig. (2-tailed)	.000	
	Ν	200	200

\*\*. Correlation is significant at the 0.05 level (2-tailed).

## Conclusions based on the decision rule

Since the r calculated (0.000) is less than the level of significance or r tabulated (0.05), we reject the null hypothesis and conclude that from our survey, that the quality standard in colleges of education in Nigeria is high.

The value of the Pearson correlation coefficient of 0.581 depicts that the value of education is relatively high. See table 11 above.

#### Hypothesis 2

H<sub>0</sub>: The level of ICT in colleges of education is low

H1: The level of ICT in colleges of education is high

## Level of significance: 0.05

## **Decision rule:**

In taking decision for "r", the following riles shall be observed;

i) If the value of "r" tabulated is greater than "r" calculated, accept the alternative hypothesis (H<sub>1</sub>) and reject the null hypothesis (H<sub>0</sub>).

ii) If the "r" calculated is greater than the "r" tabulated, accept the null hypothesis (H<sub>0</sub>) while the alternative hypothesis is rejected.

#### **Table 12 Correlations**

	-	There is high level of ICT knowledge in colleges of education.	ICT is a necessary tool for educational dev in colleges of education
There is high level of ICT knowledge in Pearson Correlation		1	.687**
	Sig. (2-tailed)		.000
	Ν	200	200
ICT is a necessary tool for educational de	v Pearson Correlation	.687**	1
in coneges of education	Sig. (2-tailed)	.000	
	Ν	200	200

\*\*. Correlation is significant at the 0.05 level (2-tailed).

## Conclusions based on the decision rule

Since the r calculated (0.000) is less than the level of significance or r tabulated (0.05), we reject the null hypothesis and conclude that from our survey, that there is a high level of ICT knowledge in colleges of education.

The value of the Pearson correlation coefficient of 0.687 depicts that there is a relative knowledge of ICT in colleges of education, the knowledge of ICT in colleges isn't too high. See table 12 above.

## Hypothesis 3

H<sub>0</sub>: The impact of ICT in the quality of education in colleges of education is low

H1: The impact of ICT in the quality of education in colleges of education is high

## Level of significance: 0.05

## **Decision rule:**

In taking decision for "r", the following riles shall be observed;

- i) If the value of "r" tabulated is greater than "r" calculated, accept the alternative hypothesis (H<sub>1</sub>) and .reject the null hypothesis (H<sub>0</sub>).
- ii) If the "r" calculated is greater than the "r" tabulated, accept the null hypothesis (H<sub>0</sub>) while the alternative hypothesis is rejected.

## **Table 13 Correlations**

		there is high impact of ICT in the quality of education in colleges of educatio	There is high level of ICT knowledge in colleges of education.
there is high impact of ICT in the quality of Pearson Correlation education in colleges of education Sig. (2-tailed)		1	.968** .000
	Ν	200	200
There is high level of ICT knowledge in colleges	Pearson Correlation	.968**	1
or education.	Sig. (2-tailed)	.000	
	Ν	200	200

\*\*. Correlation is significant at the 0.05 level (2-tailed).

#### Conclusions based on the decision rule

Since the r calculated (0.000) is less than the level of significance or r tabulated (0.05), we reject the null hypothesis and conclude that from our survey, that the impact of ICT in the quality of education in colleges of education is high

The value of the Pearson correlation coefficient of 0.968 depicts that there is a very high impact f ICT in the quality of education in colleges of education. See table 13 above.

#### **Summary of Major Findings**

- The quality of education though is relatively high. See table 5
- That there is a high impact of ICT in the quality of education in colleges of education. see table 8
- That there is a relatively high knowledge of ICT in colleges of education. See table 7.
- That adequate knowledge of ICT in colleges of education would help boost the quality of graduates from our colleges of education. See table 9.
- That adequate knowledge of ICT in colleges of education would help curtail the rate of unemployment as our graduates can be self employed upon graduation. See table 10.

#### Conclusion

The study has been able to assess the position of Information and Communications Technology (ICT) as a change envoy for high standard education in Colleges of Education in Nigeria. Findings have revealed that quality of education though is relatively high. That there is a high impact of ICT in the quality of education in colleges of education. The study hinted that, there is a relatively high knowledge of ICT in colleges of education. It is clear that adequate knowledge of ICT in colleges of education would help boost the quality of graduates from our colleges of education. There is need for serious campaign/awareness on the significance/importance ICT among students and lecturers.

#### Recommendations

Based on the findings of the study, the following recommendations were made:

- 1. More ICT knowledge should be created in our colleges of education so as to boost the quality of education; this is because proper ICT knowledge would help in the educational development in Nigeria.
- 2. In other to boost the quality of our graduates from colleges of education in Nigeria, more efforts have to be made in entrenching ICT in the school curriculum, so that when they graduate they can be able to compete with their contemporaries all over the world.
- 3. TETFund should also map out yearly allocation for colleges of education, data procurement which will be access by both staff and students.

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